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12341

BSIT/D-12

PROGRAMMING IN ·C++–I

Paper–BSIT-502

he Allowed : 3 Hours]   [Maximum Marks : 45

te : Attempt **five** questions in all, selecting at least **one** question from each Unit. Question No. **1** is compulsory. All questions carry equal marks.

(Compulsory Question)

(a) Make table group of operations in increasing order of precedence :

     1, ++, – –, –, *, 1, %, +, –, <, >, <=, >=, = =, 1, =, + =, – =, *=, 1=   3

(b) Explain Abstract class.   1

(c) Explain return by Reference.   1

(d) Const qualifier.   1

(e) Explain public, private, protected with reference to object oriented paradigm.   3

UNIT–I

2. (a) What is the difference between Object Oriented Programming and Procedural Programming? 5

   (b) What is Polymorphism? Explain different types of Polymorphism with suitable example. 4

3. (a) What is enumerated data type? Give an example. 3

   (b) What is Pre Processor Directive? Explain its usage in C++.

   (c) Specify different uses of scope resolution operation in C++.

UNIT–II

4. (a) Give the tabular difference between structures, union and classes.

   (b) What are Strings? Are they standard or derived data types? Write an interactive program to check whether a given string is palindrome or not?

5. (a) Write a program to swap the two arrays by pointers by reference and by value. Compare the three ways.

   (b) Explain any three string functions with examples.

UNIT–III

6. (a) Explain inline functions and its benefits over simple function and C' macro.

   (b) What is a Generic function? Write a C++ program to create a template for finding maximum elements of an array and demonstrate it for integer and character array. 5

7. (a) Explain Recursive functions with example. 4

   (b) Compare Overloading and Overriding with examples. 5

UNIT–IV

8. (a) Write a program to keep track of number of instances created, alive and destroyed using members, constructors and destructors. 5

   (b) Why do we pass object as reference in Copy constructor? 5

9. (a) Explain the concept of a Destructor in a class. What is its role in terms of cleanup of unwanted objects? 5

   (b) Compare Objects and Classes. 4